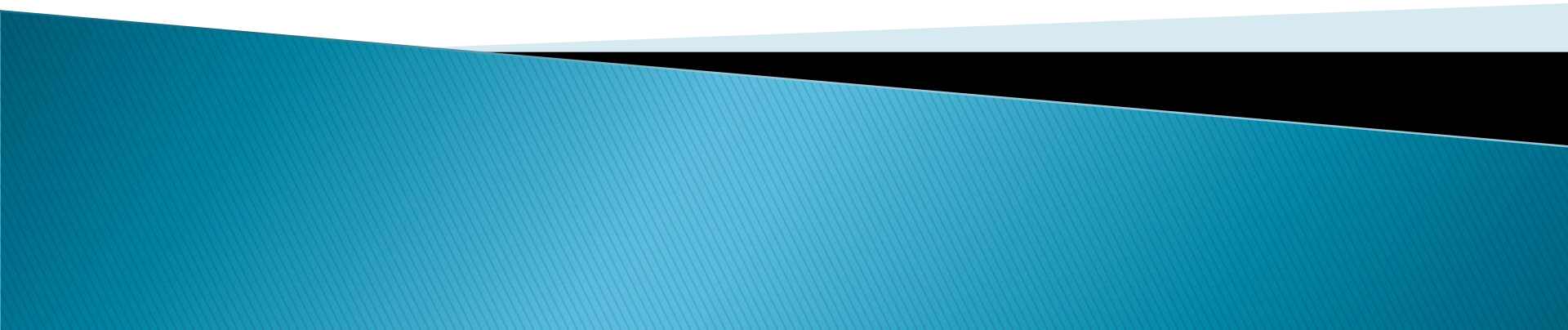


Alabama Energy Plan

Survey Results



▶ Energy Plan Survey

- A survey was developed requesting stakeholder opinions and inputs on opportunities and barriers related to energy efficiency and renewable energy in the state of Alabama
- The survey was sent out to stakeholders from multiple industry segments
- 417 survey responses were received by the January 18, 2013 deadline
- Results of the survey follow

► Survey Participants – Stakeholders



*417 responses

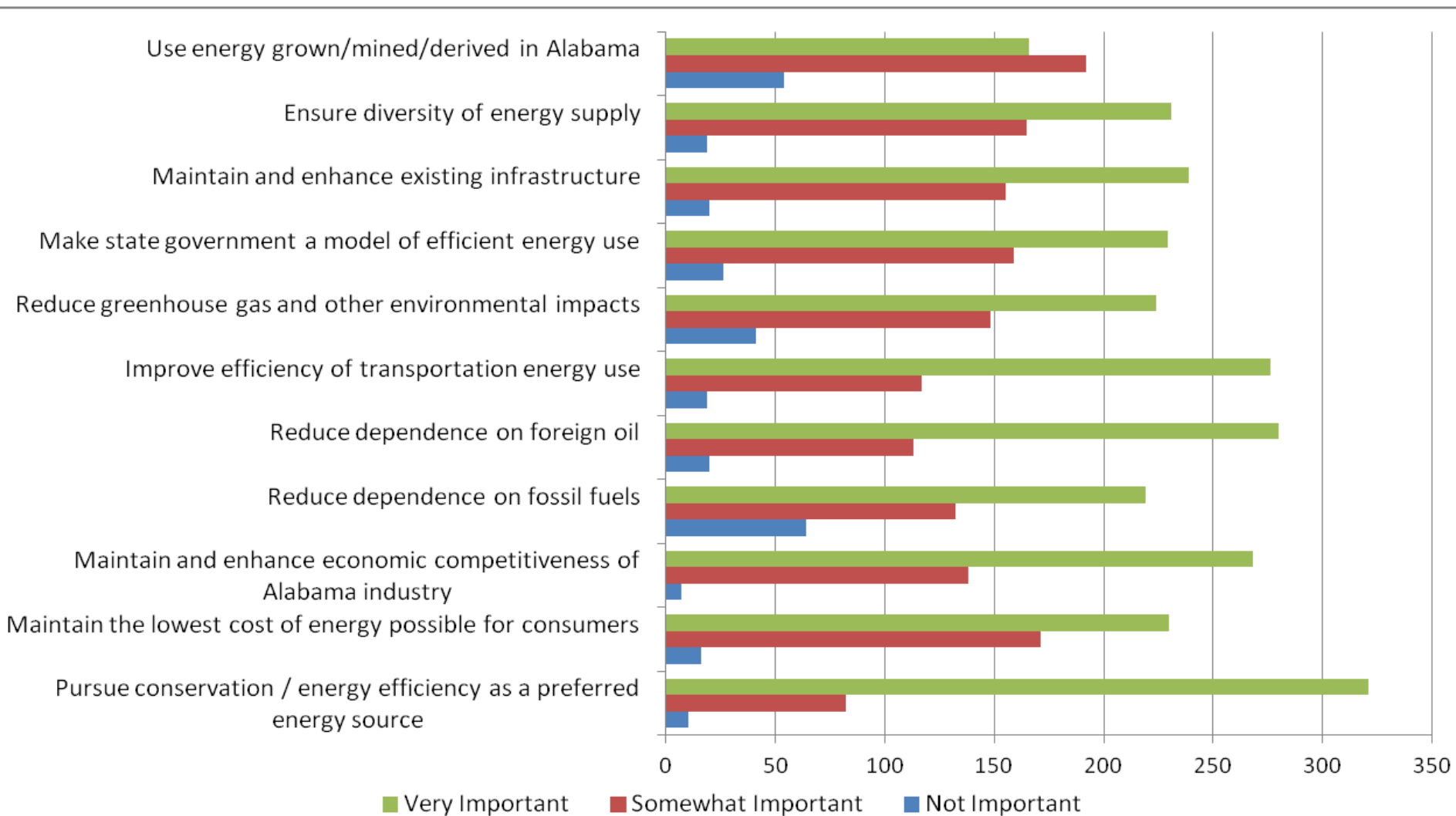
▶ Energy Plan Survey

Survey questions:

- Please rank the importance of [listed] priorities for the Alabama Energy Plan.
- Please tell us your opinion on the potential policy options for the state of Alabama.
- What key opportunities and/or barriers related to energy supply and renewable energy do you recommend for consideration in Alabama's Energy Plan?
- What key opportunities and/or barriers related to energy efficiency do you recommend for consideration in Alabama's Energy Plan?
- What key opportunities and/or barriers related to transportation fuels do you recommend for consideration in Alabama's Energy Plan?
- What is working now that needs more support, what is not working and what new initiatives are needed?
- Please provide any other recommendations to help develop an appropriate and actionable Alabama Energy Plan.

► Priorities for the Alabama Energy Plan

Ranking of priorities based on level of importance:



► Priorities for the Alabama Energy Plan

- Stakeholders predominately consider the most important priority for the Alabama Energy Plan to be:

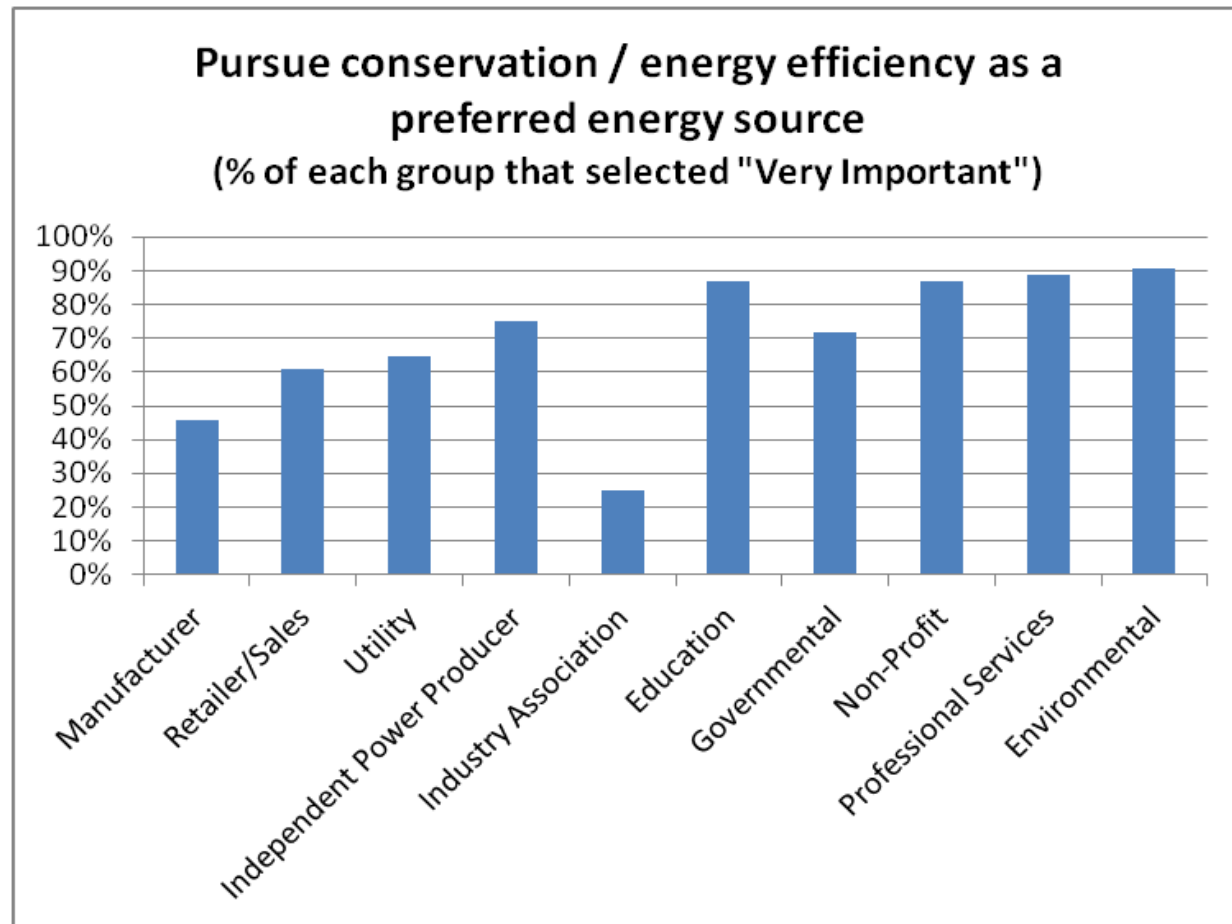
Pursue conservation / energy efficiency as a preferred energy source

> Other priorities ranked of high importance:

- Reduce dependence on foreign oil
- Improve efficiency of transportation energy use
- Maintain and enhance economic competitiveness of Alabama industry

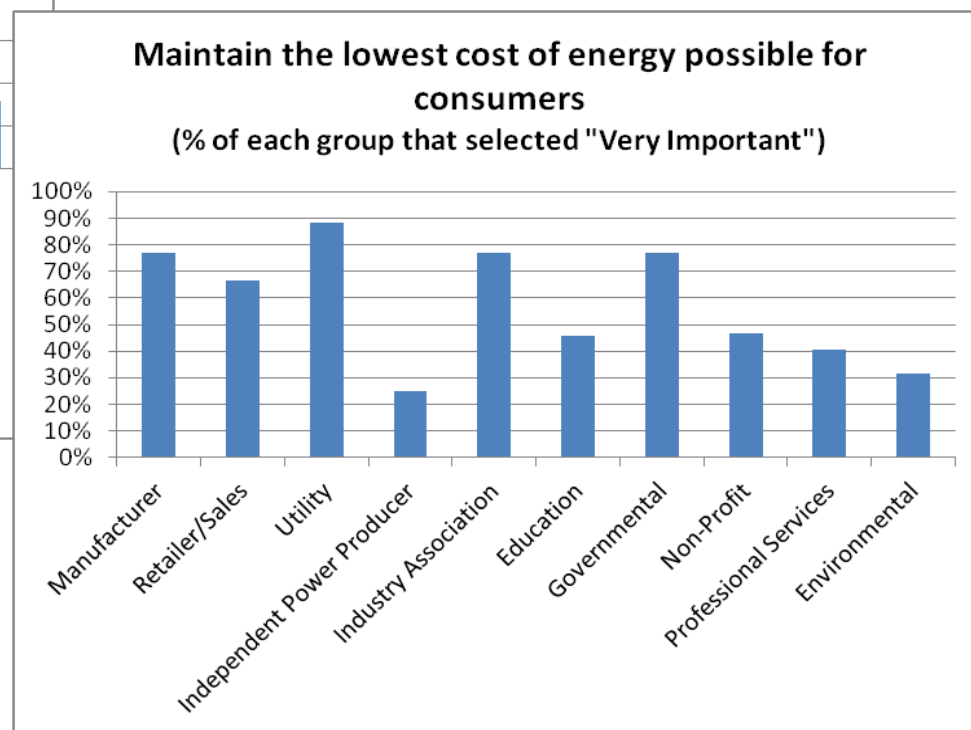
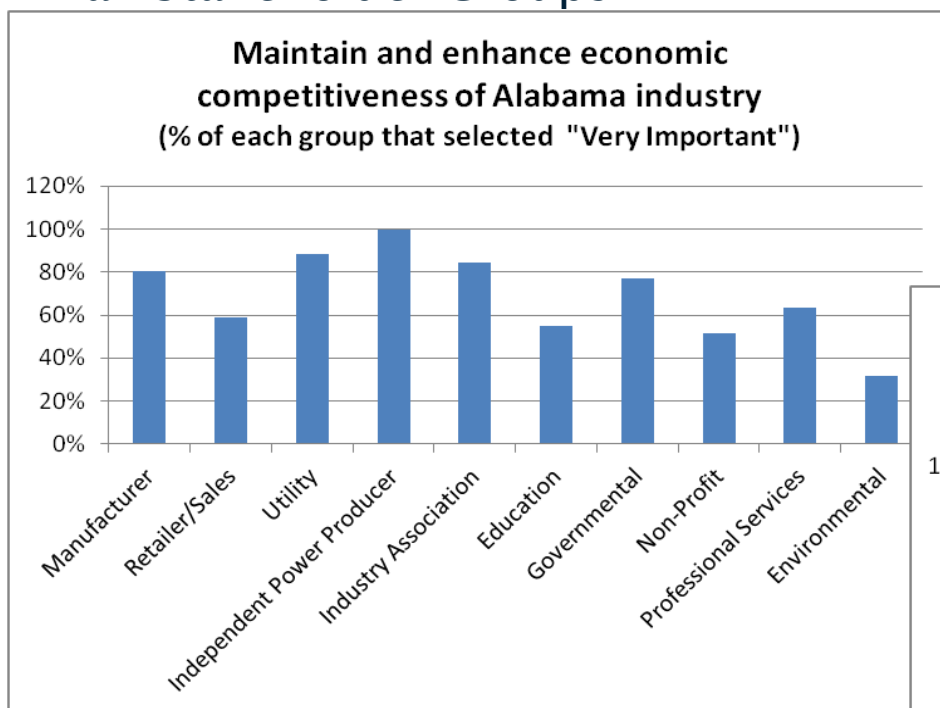
Priorities for the Alabama Energy Plan

“Conservation/Efficiency” priority compared among all Stakeholder Groups



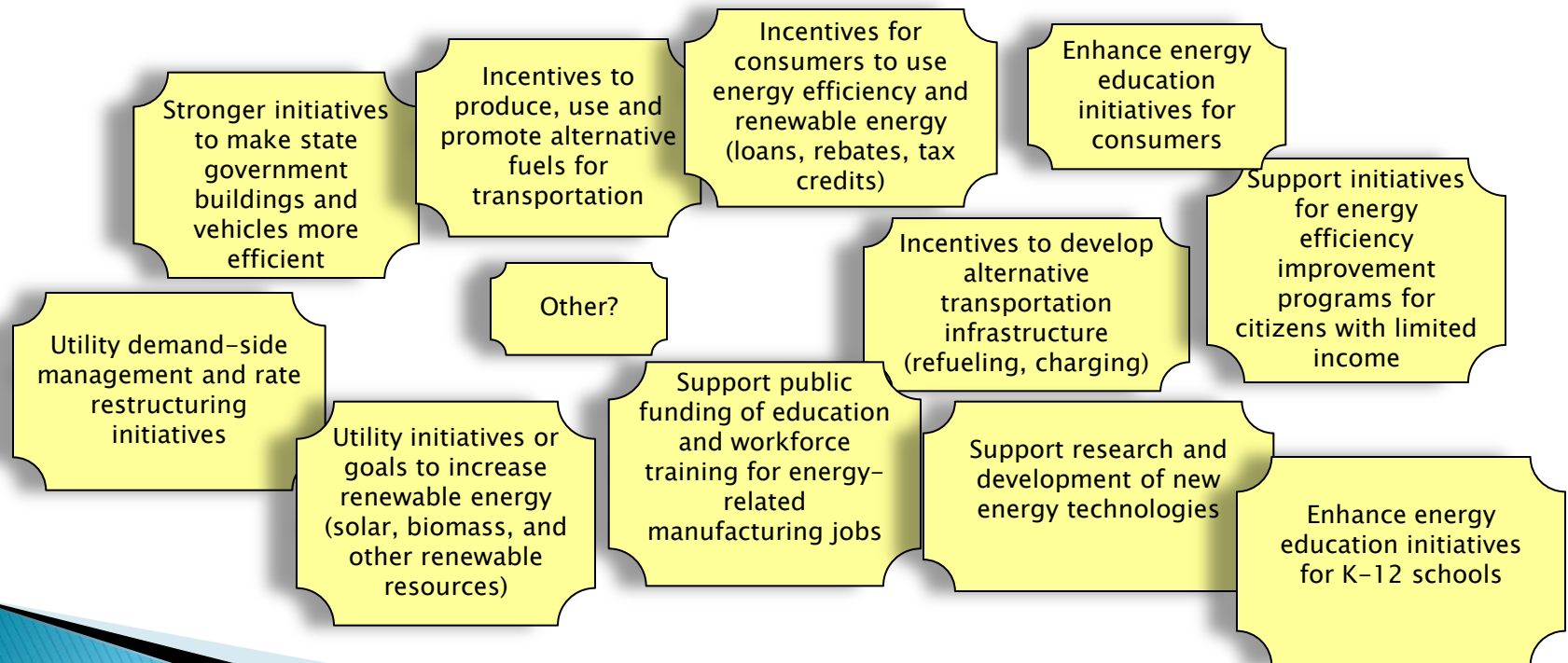
Priorities for the Alabama Energy Plan

“Economic competitiveness” & “Low consumer cost” priorities among all Stakeholder Groups



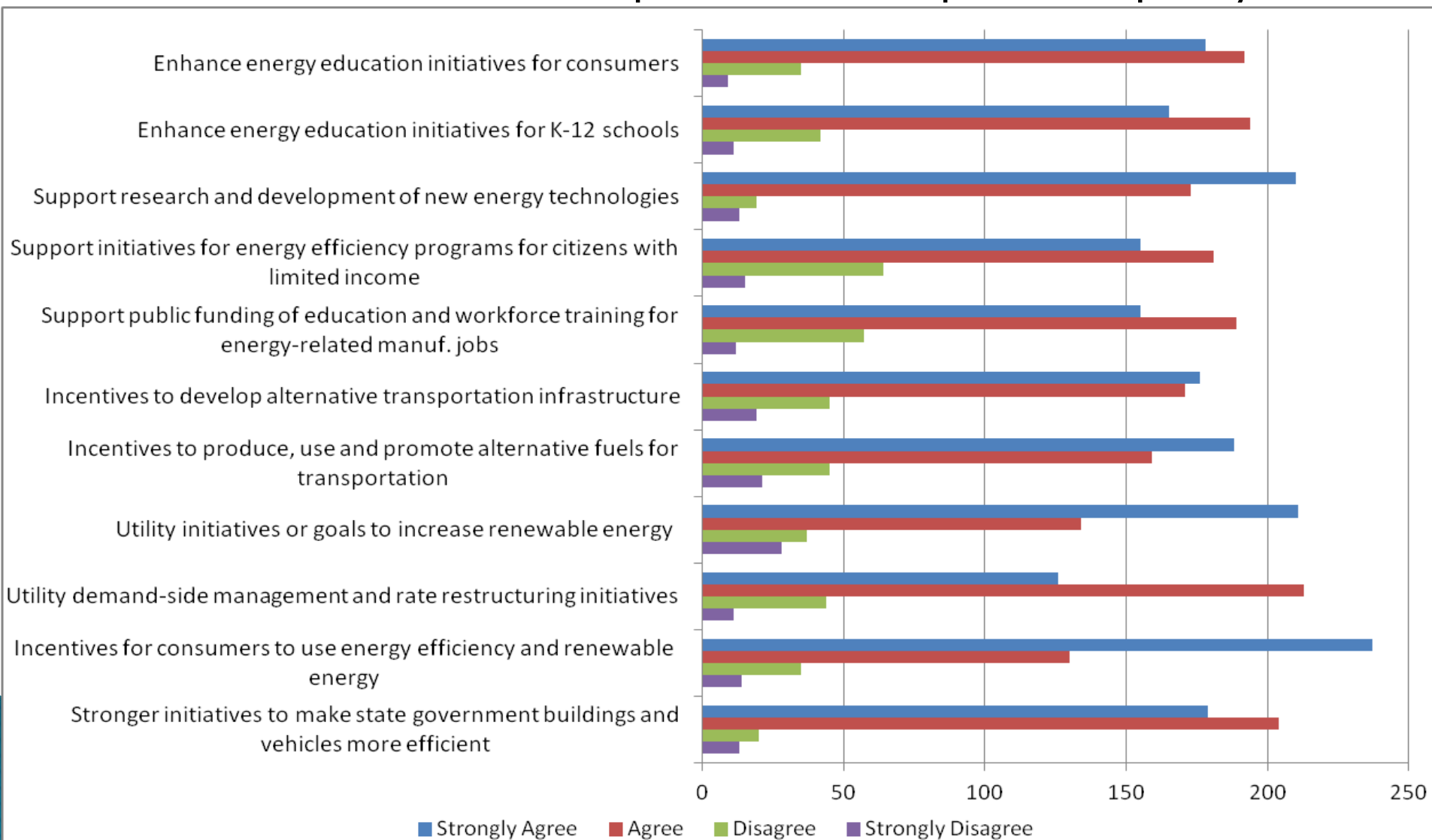
► Policy Options for the State of Alabama

- What policy options should be implemented to help achieve the Alabama Energy Plan priorities?



► Policy Options for the State of Alabama

Stakeholders' combined opinions on the potential policy



► Policy Options for the State of Alabama

Top Ranked Policy Options by Stakeholder groups

Incentives for consumers to use energy efficiency and renewable energy

- Professional Services
- Education
- Non-Profit

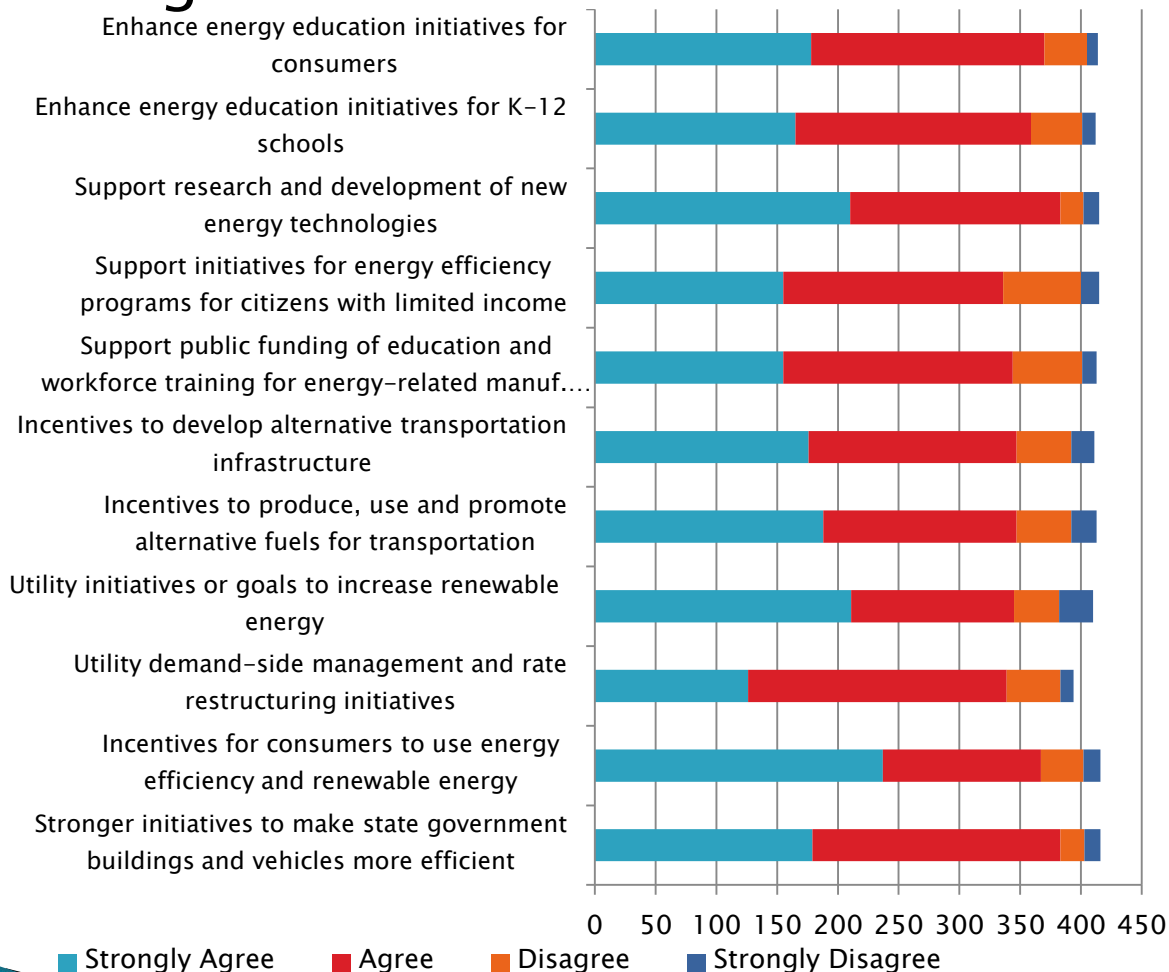
Support research and development of new energy technologies

- Manufacturing
- Education
- Non Profit
- Industry Association
- Government

Utility initiatives or goals to increase renewable energy

- Professional Services
- Education
- Stronger initiatives to make state government buildings and vehicles more efficient
- Manufacturing
- Utility
- Professional Services
- Non-Profit
- Industry Association
- Government

► Policy Option Rankings – Strongly Agree / Agree Combined



Stronger Initiatives to make state government buildings and vehicles more efficient

Support research and development of new energy technologies

Enhance energy education for consumers

Incentives for consumers to use energy efficiency and renewable energy

▶ Energy Supply and Renewable Energy

▶ Key Opportunities and Barriers

Common themes among responses:

> OPPORTUNITIES:

- Solar energy costs are decreasing
- Incentives for energy efficiency and renewable energy need improvement to remain competitive
- Support and leadership is needed from utilities
- Use of in-state energy resources
- Revised rate structure favoring less energy use
- Higher utilization of natural gas

> BARRIERS:

- High costs of renewable energy
- Political culture hesitant for change
- Lack of funding for research of new energy technologies
- Lack of public knowledge and awareness
- Alabama energy infrastructure and utility policies do not support new energy resources
- Resource constraints (e.g. wind)

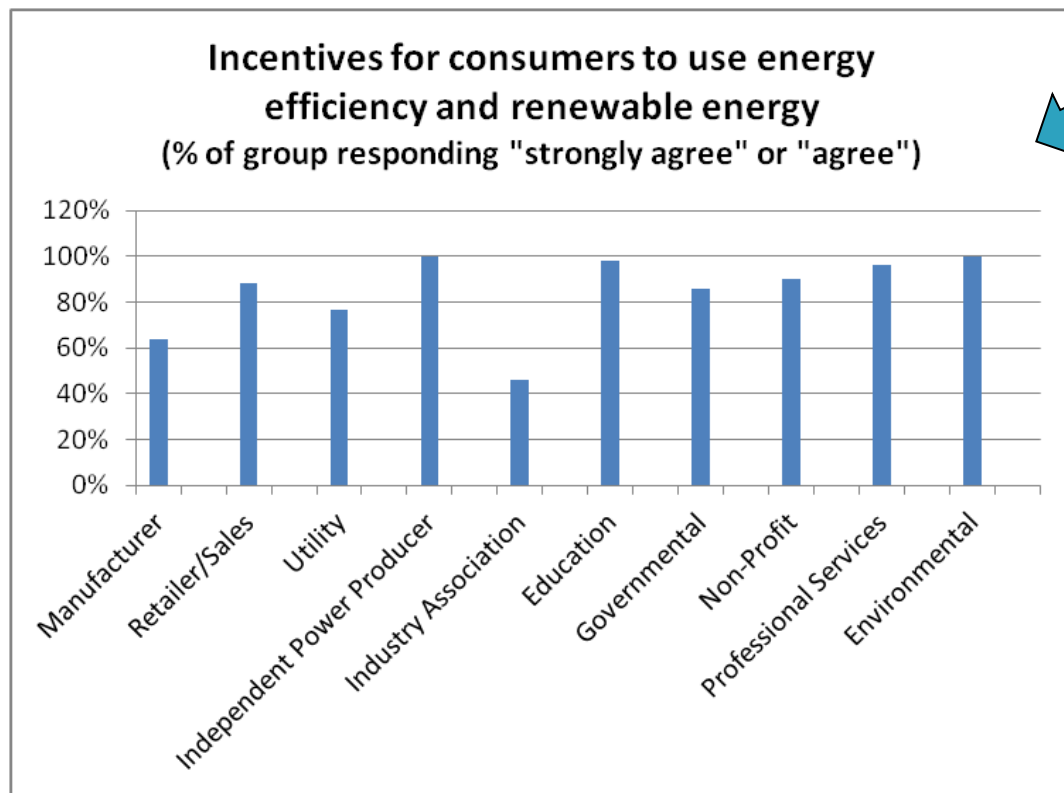
▶ Energy Supply and Renewable Energy

▶ Key Opportunities and Barriers

> OPPORTUNITIES:

- **Incentives for energy efficiency and renewable energy**

- Support and leadership from Utilities
- Use of in-state energy resources
- Revised rate structure favoring less energy use
- Higher utilization of natural gas

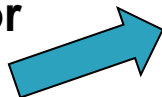


▶ Energy Supply and Renewable Energy

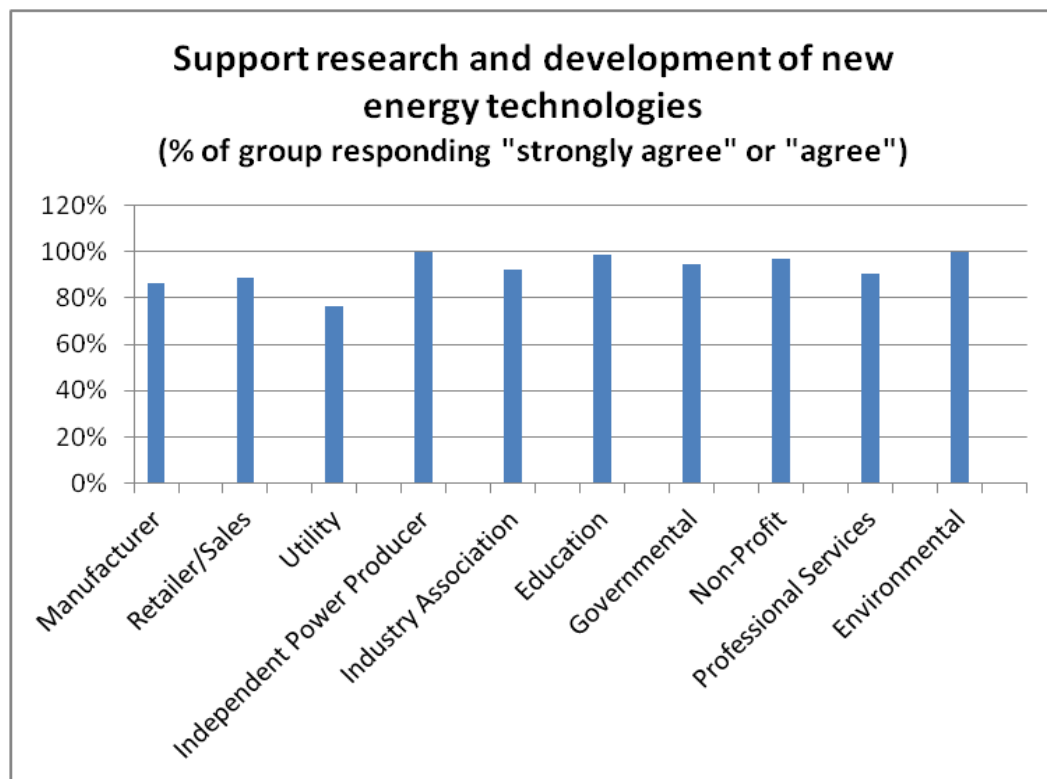
▶ Key Opportunities and Barriers

> BARRIERS:

- High costs of renewable energy
- Political culture hesitant for change
- **Lack of funding for research of new energy technologies**
- Lack of public knowledge and awareness
- Alabama energy infrastructure and utility policies do not support new energy resources



Stakeholders across the board highly agree that support of research and development of new technologies is an important initiative for Alabama



▶ Energy Efficiency

▶ Key Opportunities and Barriers

Common themes among responses:

> OPPORTUNITIES:

- Educate consumers and businesses
- Incentives to consumers and businesses
- Residential and Industry retrofits
- Get utility and government buy in
- Enforcement of building energy codes
- State lead by example
- Set goals and implement tracking
- Expand AlabamaSAVES

> BARRIERS:

- High cost of some measures
- Utility reluctance to participate in state-wide programs
- Resistance to change
- Lack of education
- State and federal budgets
- Capital cost of upgrades
- Lack of funding

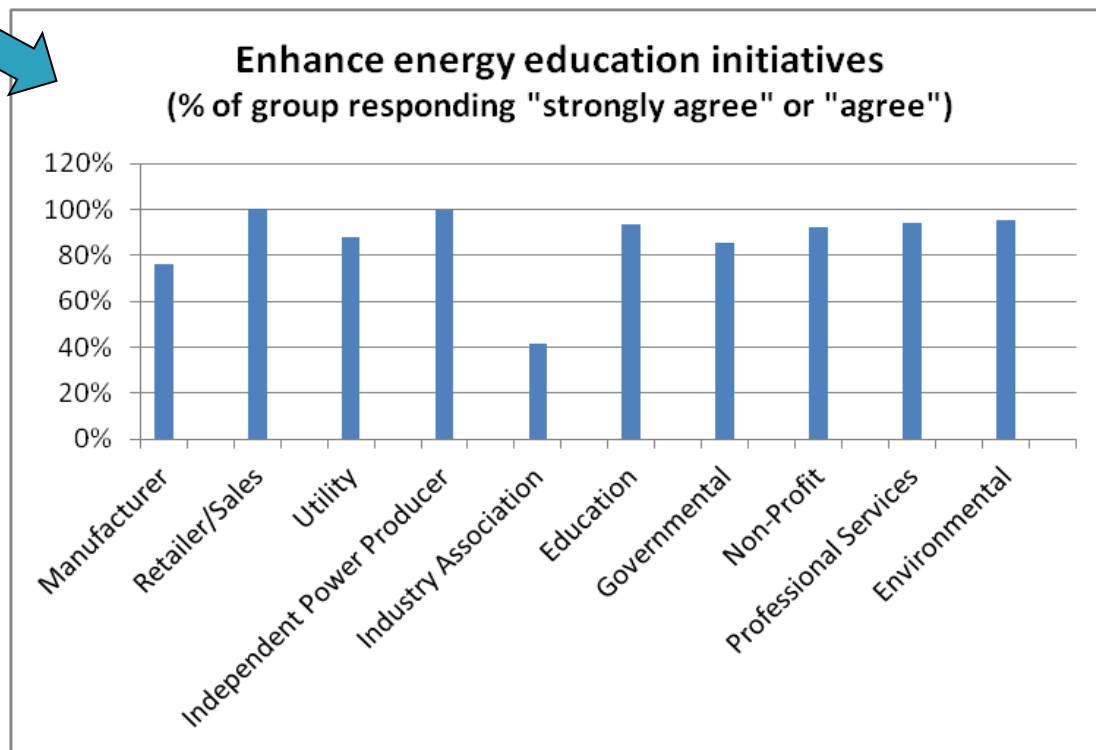
▶ Energy Efficiency

▶ Key Opportunities and Barriers

> OPPORTUNITIES:

- Get utility and government buy in
- **Educate consumers and businesses**
- Residential and Industry retrofits
- Incentives to consumers and businesses
- Enforcement of building energy codes
- State lead by example
- Set goals and implement tracking
- Expand Alabama SAVES

A main concern and barrier that was expressed was simply the lack of public knowledge about energy efficiency practices and incentives available



▶ Transportation Fuels

▶ Key Opportunities and Barriers

Common themes among responses:

> OPPORTUNITIES:

- Incentivize alternative fuels
- Develop alt fuel infrastructure
- Increase utilization of CNG, LNG, Biomass
- Increase electric vehicles and infrastructure
- Biofuel production
- Government and ALDOT support
- Research potential uses and fuels


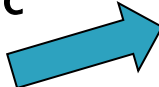
> BARRIERS:

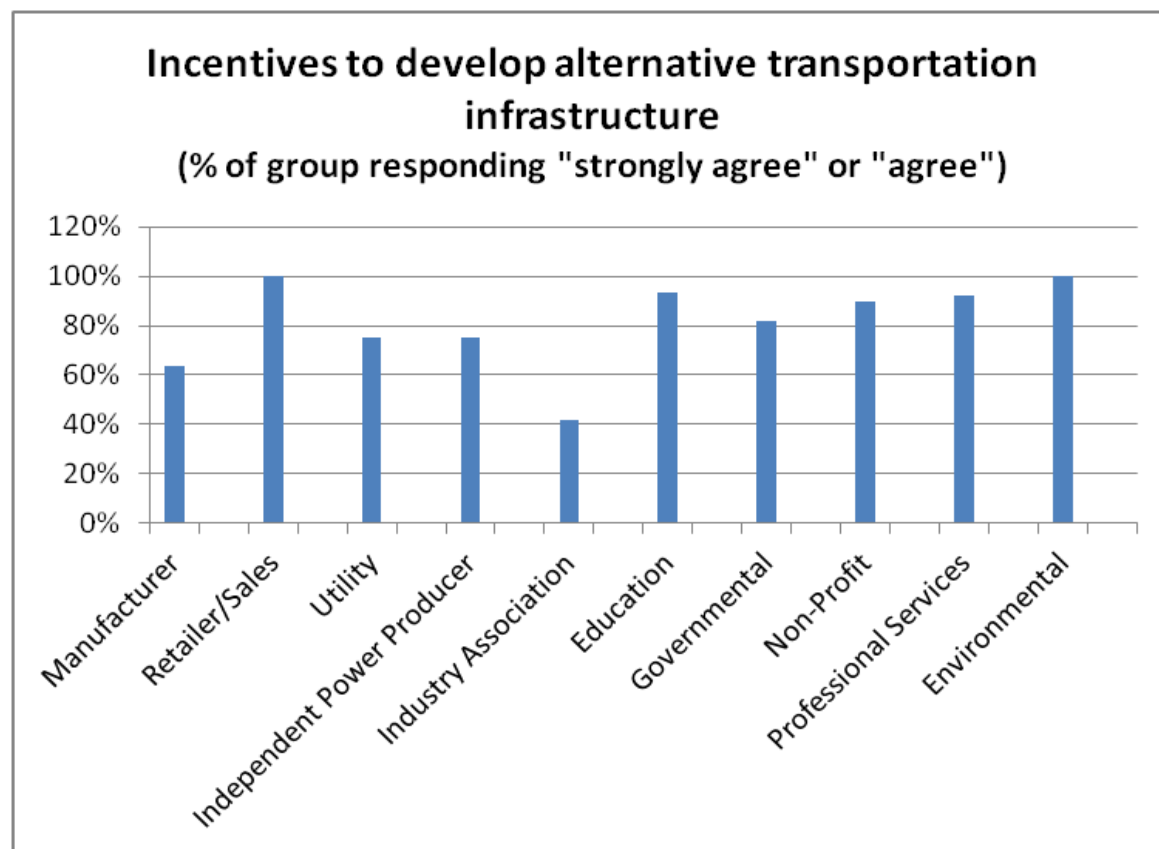
- Cost
- Ethanol production economics
- Lack of mass transit
- Lack of alternative fuel choices statewide
- Lack of infrastructure
- Lack of incentives

▶ Transportation Fuels

▶ Key Opportunities and Barriers

> OPPORTUNITIES:

- Incentivize alternative fuels
- **Develop state infrastructure** 
- **Increase electric vehicles and infrastructure** 
- Increase utilization of CNG, LNG, Biomass
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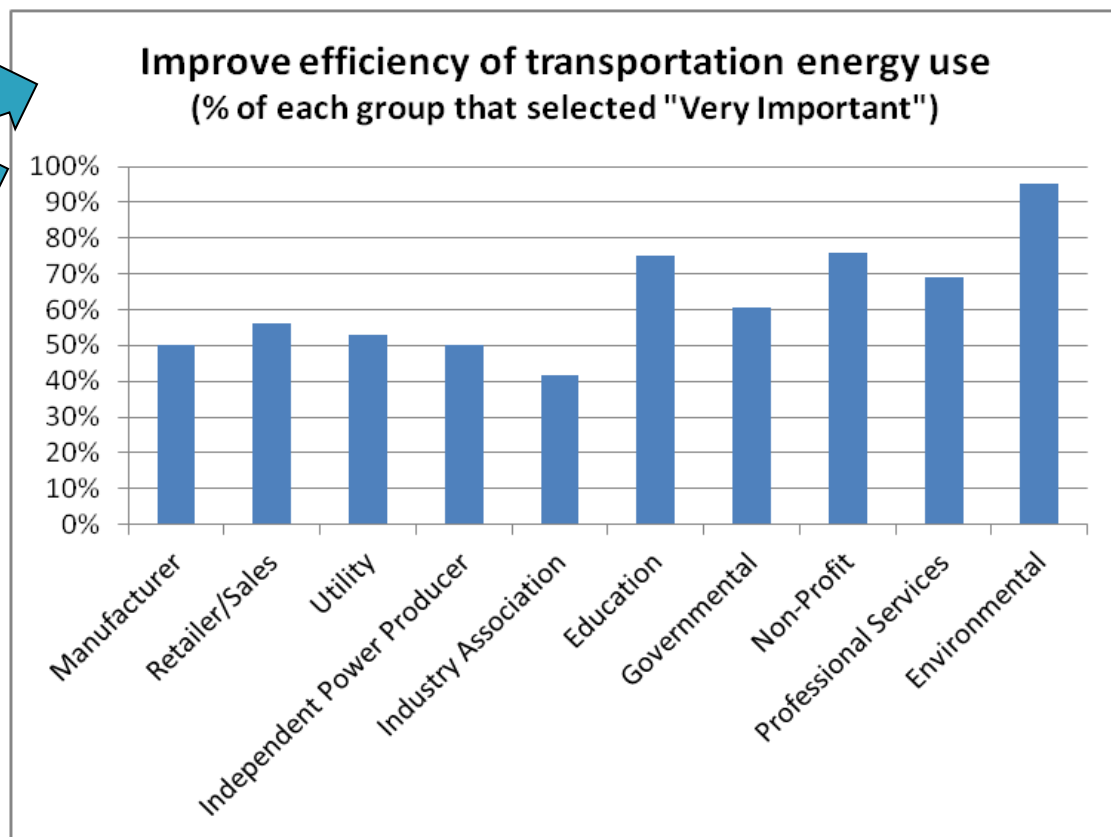


▶ Transportation Fuels

▶ Key Opportunities and Barriers

> BARRIERS:

- Cost
- Ethanol production economics
- **Lack of mass transit**
- **Lack of alternative fuel choices statewide**
- Lack of infrastructure
- Lack of incentives



► What is working now that needs more support, what is not working, and what new initiatives are needed?

> NEW INITIATIVES:

- Grants for industrial energy efficiency investments
- Increased funding and expansion of public transportation
- Energy efficiency and renewable energy incentives for consumers
- Educate consumers and businesses
- Incentives to attract manufacturers of required materials for energy efficiency and renewable energy
- Training on renewable energy/energy efficiency to sustain jobs

> NEEDS MORE SUPPORT:

- Energy efficiency programs
- Energy revolving loan programs
- Solar power incentives
- Alternative fuel initiatives
- Water leak detection programs
- State buildings energy efficiency initiatives(funding and compliance support)
- Energy code implementation and enforcement
- Residential energy efficiency incentive programs

> NOT WORKING:

- PSC oversight of utilities
- Lack of support for fuel alternatives
- Minimal recycling efforts
- Weatherization program lacks buy-in from utilities
- Politics hindering change
- Mass transit

▶ Sample of responses for developing an appropriate and actionable Alabama Energy Plan:

- “Rank the demand-side inefficiencies and target improvements to those that are most inefficient first”
- “There should be public review and input after creation of plan, before final recommendation”
- “Emphasize the dollars saved and the better lifestyle in an energy efficient home or building”
- “Develop programs that support energy efficiency in manufacturing that are tied to workforce development and economic development”
- “Encourage more partnerships among utilities, government, industry to fund energy efficiency programs”
- “I think it is important to weigh the cost/benefit of energy efficiency for all these initiatives”
- “We would like to see a energy plan developed with the consumers savings a top priority”
- “The Alabama Public Service Commission has the authority to create an appropriate cost recovery, lost revenue adjustment mechanism and performance incentive that will allow the regulated utilities to profit from energy efficiency”
- “Establish renewable energy web sites at the State level that provide links to installers, manufacturers etc. of renewable energy systems and lighting”
- “Recognize economic advantages of energy and water efficiency for job growth and economic development and count the full economic and environmental costs of all fuels.”

▶ Sample of responses (continued):

- “Recognize and support the economy/environment connection – both are needed – vibrant economy ⇔ viable environment.”
- “Recommend establishing broad and strategic objectives with specific and measurable action plans and milestones.”
- “Get more people involved in the process with more information. More participation will result in more ideas being discussed.”
- “The plan should be balanced, comprehensive, realistic and practical. It should be modeled on other states that are not only energy consumers, but, like Alabama, are significant energy producers.”
- “The state needs to efficiently manage the assets for which it is directly responsible (buildings, state cars), and communicate ways to be efficient.”
- “The key is consumer education. People must begin to realize that they can be more comfortable for less money in a well built energy efficient home.”
- “We don’t have to invent the wheel here. Look at what works in other states.”
- “Unfunded mandates are a challenge. If the state of Alabama wants to be a leader in energy reduction and efficiency, funding MUST be a part of the equation.”
- “Governor must push for and support plan recommendations/goals and ensure that state agencies participate in a meaningful way.”
- “The stakeholders must leave their biases and allegiances outside of the meeting room. Besides developing an appropriate and actionable Alabama Energy Plan., it is desirable to establish an open dialogue and working relationship that can continue after the plan is developed.”
- “Consider Energy/Water nexus (i.e. connection between the two) in Energy Plan”

► Conclusions

- Stakeholders generally would like to see positive changes and an increase in energy efficiency and renewable energy efforts, however, there are certain barriers that must be overcome
- Incentivizing renewable energy and energy efficiency in addition to educating the public on the benefits and cost savings were widely mentioned
 - In order to successfully expand energy efficiency and renewable energy efforts in Alabama, the key is creating awareness and making these practices more appealing to individuals and businesses
 - State government should lead by example
- Main concerns over the high cost of renewable energy and lack of government and utility buy-in
 - Some pushback to renewable energy efforts were expressed due to concern that higher costs would be passed down to the customers
 - Other proponents of these efforts worry that significant change will be hindered by political agendas